Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Revision of the Commission's Rules	)	
to Ensure Compatibility With Enhanced	)	CC Docket No. 94-102
911 Emergency Calling Systems	)	
	)	
Amendment of Parts 2 and 25 to	)	
Implement the Global Mobile Personal	)	
Communications by Satellite (GMPCS)	)	
Memorandum of Understanding and	)	
Arrangements; Petition of the National	)	IB Docket No. 99-67
Telecommunications and Information	)	
Administration to Amend Part 25 of the	)	
Commission's Rules to Establish Emissions	)	
Limits for Mobile and Portable Earth	)	
Stations Operating in the 1610-1660.5 MHz	)	
Band	)	

REPLY COMMENTS OF TELENOR SATELLITE SERVICES, INC.

Telenor Satellite Services, Inc., on behalf of itself and its affiliates Telenor Satellite, Inc. and Telenor Satellite Services Holdings, Inc. ("Telenor"), hereby files these Reply Comments in response to the Commission's Further Notice of Proposed Rulemaking in the above-referenced proceedings.[1] The FNPRM seeks comment on a number of matters relating to the applicability of E911 requirements to Mobile Satellite Services ("MSS").

I. Introduction

A number of parties filed comments in this proceeding in which it was made clear that the requirements contemplated by the Commission in the FNPRM would be wholly

---

[1] *Revision of the Commission's Rules to Ensure Compatibility With Enhanced 911 Emergency Calling Systems,* Further Notice of Proposed Rulemaking, FCC 02-326 (released Dec. 20, 2002) ("FNPRM").

inappropriate and cost-ineffective if applied to MSS providers, particularly those offering services through the Inmarsat system.[2] Telenor files these Reply Comments for the purpose of supporting and reinforcing this conclusion and to urge the Commission to recognize that applying E911 services in the context of the Inmarsat system is fundamentally inappropriate and unnecessary, the classic equivalent of trying to fit a square peg in a round hole.

The business now operated by Telenor in the United States was created through the purchase by Telenor's parent corporation of substantially all of the assets of COMSAT Mobile Communications ("CMC"), the former U.S. Signatory to Inmarsat. Telenor through itself and its predecessor has operated land earth stations in the United States and elsewhere for over 25 years, offering customers throughout the world a variety of maritime, aeronautical, and land mobile satellite services using the Inmarsat system and other satellites, and Telenor's parent corporation is a 15 percent shareholder in the privatized Inmarsat.

Telenor is well-positioned in terms of experience in and understanding of the MSS market – particularly the Inmarsat services market -- to provide the Commission with an accurate assessment of the difficulties and costs that would be associated with applying the proposed requirements to MSS operators using the Inmarsat system.

---

[2] *See, e.g.,* Comments of Inmarsat Ventures, PLC in CC Docket No. 94-102 (filed Feb. 19, 2003) ("Inmarsat Comments"); Comments of Stratos Mobile Networks, Inc. and Stratos Communications, Inc. in CC Docket No. 94-102 (filed Feb. 19, 2003) ("Stratos Comments").

II. Discussion

A. MSS Providers Do Not Meet the Criteria for Application of E911 Requirements.

Telenor strongly supports the conclusions of both Inmarsat and Stratos in their comments that MSS, particularly service provided using the Inmarsat system, does not meet the criteria set forth in the FNPRM for complying with E911 requirements.[3] We will not repeat all of the arguments made by these parties, but Telenor does wish to emphasize several points.

First, Telenor believes that users of the Inmarsat system in particular simply have no expectation at all of access to U.S. 911 and E911 services. As both Inmarsat and Stratos have noted, the overwhelming majority of Inmarsat users use their terminals in the maritime and aeronautical environment, where 911 services do not apply.[4] In addition, however, Telenor wishes to emphasize that, of the customers who do use their terminals in a land mobile environment – itself only a fraction of Inmarsat's total user base -- virtually all of them do so outside of the United States. Telenor (and Stratos) has only been authorized by the Commission to provide domestic land mobile services for a little over one year, and domestic land mobile customers – *i.e.,* customers utilizing Telenor's blanket domestic licenses – only represent a tiny fraction of Telenor's total customer base.[5] Further, for reasons stated by Inmarsat and Stratos in their comments,

---

[3] Inmarsat Comments at 4; Stratos Comments at 2.

[4] The Commission has itself recognized that 911 services are of no use in the maritime and aeronautical environments. *See, e.g.,* FNPRM at ¶¶ 13, 45.

[5] This is a major distinguishing factor between the Inmarsat system and the systems of, for example, Motient Satellite Ventures ("MSV") and Globalstar, which are designed and licensed specifically *to* serve the domestic land mobile market. Globalstar, for example,

the few Inmarsat domestic land mobile users almost invariably use their terminals only in the most remote locations, where not even a cellular customer would have expectations of 911 service. Given all of these factors, it cannot reasonably be asserted that users of the Inmarsat system have any expectation whatsoever of access to U.S. 911 and E911 services.

Second, Telenor agrees with Inmarsat and Stratos that it is not technically and operationally feasible for Inmarsat-based service providers to support E911. As noted by both parties, even the most advanced Inmarsat terminals currently on the market – the Mini-M and its derivative, GAN, are not capable of narrowing down a user's location to less than a few thousand square miles. The more mature Inmarsat technologies cannot even achieve this minimal level of precision, as they may cover an entire ocean region with one beam. In this case, Telenor would not be able to determine whether a customer placing a call over the AOR-W satellite, for example, was located in Dublin, California, Dublin, New Hampshire, or Dublin, Ireland.

Further compounding these difficulties is the open nature of the Inmarsat system. Unlike cellular systems, and even other MSS systems such as Globalstar and MSV which are closed centrally-managed systems with small and narrowly-defined sets of terminal types, Inmarsat is a huge, widely disparate system whose only common thread is the space segment and the terminal system definitions. Service is provided by land earth station operators ("LESOs") throughout the world, each of which is owned and operated

---

notes in its comments that it has a blanket license from the FCC to operate a half a million terminals in the United States. Globalstar Comments at 2. Even if the Commission were to determine that E911 services may be appropriate for this type of system with a large domestic customer base, it still would not be appropriate to apply such requirements to the Inmarsat system, where terminals are overwhelmingly used in maritime and aeronautical settings and outside of the United States.

independently and is subject to its own set of national laws and regulations. Customers may choose to sign up for service with a particular LESO, or they can simply choose different LESOs on a per-call basis. Terminals are distributed and sold throughout the world by a variety of manufacturers, dealers, LESOs, and resellers. Stratos is essentially correct when it states that "Inmarsat . . . has approximately 250,000 terminals in use worldwide," but this does not tell the entire story. In fact, although there are 250,000 terminals *in use* throughout the Inmarsat system, Inmarsat actually "*has*" none of them.[6] Given the widely scattered nature of the system and the fact that, as mentioned above, only a tiny fraction of the terminals are even used in the United States, it would not feasible from an operational or a technical standpoint to apply a U.S. E911 requirement to Inmarsat service providers.

B. The Costs of Imposing an E911 Requirement Would Far Outweigh the Benefits.

Even if the practical hurdles associated with applying E911 requirements to Inmarsat service providers were not so high, the sheer costs of doing so would far outweigh the minimal, if any, benefit gained. As both Inmarsat and Stratos -- as well as MSV and Globalstar -- have noted, the number or emergency calls that they have handled over past years has been miniscule, in the case of Stratos, for example, about one per

[6] For this reason alone, *any* imposition by the Commission of E911 requirements for MSS would have to be applied only prospectively with respect to Inmarsat terminals. With 250,000 terminals in use around the world, licensed by dozens of national regulators, there simply is no practicable way of rendering the current base of terminals capable of complying with any new E911, ANI, or ALI requirements. Also, as MSV notes in the context of its own terminals, many terminal manufacturers have actually gone out of business through the years, making upgrades to many units all but impossible. MSV Comments at 16.

year.[7] As noted above, only a tiny fraction of Inmarsat terminals are used for land mobile purposes within the United States. Considering the huge expense that would be involved with E911 compliance, the application of these requirements to Inmarsat MSS operators such as Telenor simply cannot be justified. This is particularly true in light of the relatively small MSS customer base. While each individual cellular company can spread its costs over millions of customers, Inmarsat service providers do not have that luxury: there are only 250,000 Inmarsat terminals in use *worldwide*, served by approximately 30 different LESOs. Further, only two Inmarsat LESOs – Telenor and Stratos – are currently subject to FCC jurisdiction, so imposing such tremendous cost obligations on these companies while other LESOs around the world are not so burdened would have the result of putting Telenor and Stratos at a huge competitive disadvantage in the Inmarsat services market.

This does not mean that users of Inmarsat services should not or do not have access to emergency communications services. In fact, the Global Maritime Distress and Safety System ("GMDSS"), of which the Inmarsat system is an integral part, is probably the most sophisticated worldwide emergency distress system in use today. Telenor maintains a 24-hour/365-day customer care center at its Rockville, Maryland headquarters that is equipped to respond appropriately to maritime distress calls and other emergencies. The GMDSS system is a necessary and appropriate tool in the environment in which Inmarsat terminals are used; requiring providers to duplicate such a system for

[7] Even MSV, which operates a system that is primarily designed for domestic land mobile use, states that only 10 emergency calls were generated throughout 2002. MSV Comments at ii.

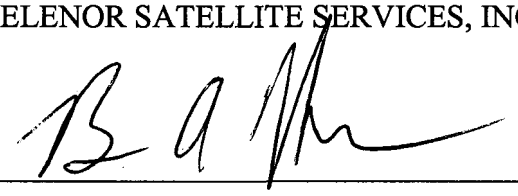
E911 services, which are neither expected nor needed in such an environment, would be a tremendous waste of resources.[8]

III. Conclusion

For the reasons discussed herein, the imposition by the Commission of E911 requirements on MSS providers, particularly those using the Inmarsat system, is not warranted by customer needs or expectations, is not technically or operationally feasible, and would be a tremendous and unnecessary burden on service providers.

Respectfully submitted,

TELENOR SATELLITE SERVICES, INC.

By: 

Bruce A. Henoch
Senior Counsel
Telenor Satellite Services, Inc.
1101 Wootton Parkway, 10th Floor
Rockville, MD 20852
(301) 838-7739

Its attorney

Date: March 25, 2002

[8] The Commission has recognized that its goal should only be to require MSS operators to "provide *appropriate* access to emergency services." FNPRM at ¶ 6 (emphasis added).